67,200-262; TSMC 99-545 Serial Number 09/588,788

LISTING OF THE CLAIMS

The following Listing of the Claims replaces all prior listings of the claims within this application.

1. (currently amended) A method for fabricating an inductor structure comprising: providing a substrate;

forming over the substrate a single spiral planar spiral conductor layer comprising a single spiral to form a single spiral planar spiral inductor comprising the single spiral, wherein a successive series of spirals within the single spiral planar spiral conductor layer comprising the single spiral is formed with a continuous variation in at least one of:

- a series of linewidths of the successive series of spirals; and a series of spacings separating the successive series of spirals.
- 2. 3. (canceled)
- 4. (currently amended) A method for fabricating an inductor structure comprising: providing a substrate;

forming over the substrate a planar spiral conductor layer to form a planar spiral inductor, wherein a successive series of spirals within the planar spiral conductor layer is formed with a continuous variation in at least one of:

a series of linewidths of the successive series of spirals; and
a series of spacings separating the successive series of spirals, wherein the
successive series of spirals is formed in a shape selected from the group consisting of a triangle,
a square, a rectangle, a higher order polygon, a uniform ellipse and a circle.

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- 5. (original) The method of claim 1 wherein the planar spiral conductor layer is formed of a conductor material selected from the group consisting of non-magnetic metal, non-magnetic metal alloy, magnetic metal, magnetic metal alloy, doped polysilicon and polycide conductor materials, and laminates thereof.
- 6. (original) The method of claim 1 wherein the variation in the series of linewidths of the successive series of spirals is an increasing progression of linewidth from a first spiral which defines the center of the planar spiral inductor having a comparatively narrow linewidth to a final spiral which defines the perimeter of the planar spiral inductor having a comparatively wide linewidth.
- 7. (original) The method of claim 6 wherein the comparatively narrow linewidth is from about 7 to about 10 microns and the comparatively wide line width is from about 17 to about 21 microns.
- 8. (original) The method of claim 1 wherein the successive series of spirals comprises from about 1 to about 8 spirals.
- 9. 15. (canceled)
- 16. (previously presented) The method of claim 1 wherein the continuous variation is a progressively increasing or decreasing continuous variation.